

# Doulos SIL - Font Features

Doulos SIL is an OpenType-enabled font that supports the Latin and Cyrillic scripts. It includes a number of optional features that may be useful or required for particular uses or languages. This document lists all the available features.

These OpenType features are primarily specified using four-letter tags (e.g. 'cv17'), although some applications may provide a direct way to control certain common features such as small caps. For more information on how to access OpenType features in specific environments and applications, see [Using Font Features](#).

This page uses web fonts (WOFF2) to demonstrate font features and should display correctly in all modern browsers. For a more concise example of how to use Doulos SIL as a web font, see *DoulosSIL-webfont-example.html* in the font package *web* folder. For detailed information see [Using SIL Fonts on Web Pages](#).

*If this document is not displaying correctly, a PDF version is also provided in the documentation/pdf folder of the release package.*

## Complete feature list

### Stylistic alternates

#### Small caps from lowercase

Affects: all lowercase letters with capital equivalents and some bracketing punctuation

| Feature    | Sample   | Feature setting |
|------------|--|-----------------|
| Standard   | a ... Z (all letters with capital equivalents) ( ) [ ] { } | smcp=0          |
| Small caps | A ... Z (all letters with capital equivalents) ( ) [ ] { } | smcp=1          |

#### Small caps from capitals

*This feature is not supported in TypeTuner Web.*

Affects: all capitals

| Feature    | Sample                 | Feature setting |
|------------|------------------------|-----------------|
| Standard   | A ... Z (all capitals) | c2sc=0          |
| Small caps | A ... Z (all capitals) | c2sc=1          |

#### Single-story a and g

*This feature was formerly called 'Literacy alternates'.*

Affects: U+0061 U+00AA U+00E0 U+00E1 U+00E2 U+00E3 U+00E4 U+00E5 U+0101 U+0103 U+0105 U+01CE U+01DF U+01E1 U+01FB U+0201 U+0203 U+0227 U+1E01 U+1E9A U+1EA1 U+1EA3 U+1EA5 U+1EA7 U+1EA9 U+1EAB U+1EAD U+1EAF U+1EB1 U+1EB3

U+1EB5 U+1EB7 U+2C65 U+2090 U+1D43 U+0363 U+0067 U+011D U+011F U+0121 U+0123 U+01E7 U+01F5 U+01E5 U+1E21 U+A7A1  
U+1D4D

| Feature      | Sample  | Feature setting |
|--------------|---|-----------------|
| Standard     | a <sup>a</sup> à á â ã ä å ā ă ǎ Ḃ Ḅ Ḥ Ḭ Ḷ Ḱ Ṁ Ṃ Ṇ Ṳ Ṵ Ṷ Ṻ Ṽ<br>ǻ ǽ ǿ ǻ ǻ ⱥ ⱦ Ⱨ ⱨ Ⱪ ⱪ Ⱬ ⱬ Ɑ Ɱ Ɐ | ss01=0          |
| Single-story | ɑ <sup>α</sup> à á â ã ä å ā ă ǎ Ḃ Ḅ Ḥ Ḭ Ḷ Ḱ Ṁ Ṃ Ṇ Ṳ Ṵ Ṷ Ṻ Ṽ<br>ǻ ǽ ǿ ǻ ǻ ⱥ ⱦ Ⱨ ⱨ Ⱪ ⱪ Ⱬ ⱬ Ɑ Ɱ Ɐ | ss01=1          |

## Single-story a (only)

Affects: U+0061 U+00AA U+00E0 U+00E1 U+00E2 U+00E3 U+00E4 U+00E5 U+0101 U+0103 U+0105 U+01CE U+01DF U+01E1 U+01FB  
U+0201 U+0203 U+0227 U+1E01 U+1E9A U+1EA1 U+1EA3 U+1EA5 U+1EA7 U+1EA9 U+1EAB U+1EAD U+1EAF U+1EB1 U+1EB3  
U+1EB5 U+1EB7 U+2C65 U+2090 U+1D43 U+0363

| Feature      | Sample  | Feature setting |
|--------------|---|-----------------|
| Standard     | a <sup>a</sup> à á â ã ä å ā ă ą ǎ ā ā á à ą ą ą á â ã ä<br>á à ă ă ă ă ă ă <sup>a</sup> <sup>a</sup> | ss11=0          |
| Single-story | a <sup>a</sup> à á â ã ä å ā ă ą ǎ ā ā á à ą ą ą á â ã<br>ä ä á à ă ă ă ă ă <sup>a</sup> <sup>a</sup> | ss11=1          |

### Single-story g (only)

Affects: U+0067 U+011D U+011F U+0121 U+0123 U+01E7 U+01F5 U+01E5 U+1E21 U+A7A1 U+1D4D

| Feature      | Sample                           | Feature setting |
|--------------|----------------------------------|-----------------|
| Standard     | g ĝ ǵ ğ ğ ǵ ǵ ġ ġ ġ <sup>g</sup> | ss12=0          |
| Single-story | g ĝ ǵ ğ ğ ǵ ǵ ġ ġ ġ <sup>g</sup> | ss12=1          |

## Barred-bowl forms

Affects: U+0111 U+0180 U+01E5

| Feature     | Sample                                       | Feature setting |
|-------------|--|-----------------|
| Standard    | $\mathfrak{d} \ \mathfrak{b} \ \mathfrak{g}$ | ss04=0          |
| Barred-bowl | $\mathfrak{d} \ \mathfrak{b} \ \mathfrak{g}$ | ss04=1          |

## Character alternates

### B hook

Affects: U+0181

| Feature         | Sample | Feature setting |
|-----------------|--------|-----------------|
| Standard        | Ḃ      | cv13=0          |
| Lowercase-style | Ḅ      | cv13=1          |

### D hook

Affects: U+018A

| Feature         | Sample | Feature setting |
|-----------------|--------|-----------------|
| Standard        | Ḑ      | cv17=0          |
| Lowercase-style | Ḓ      | cv17=1          |

### H stroke

Affects: U+0126

| Feature         | Sample | Feature setting |
|-----------------|--------|-----------------|
| Standard        | Ḥ      | cv28=0          |
| Vertical stroke | Ḧ      | cv28=1          |

### J stroke hook

Affects: U+0284

| Feature   | Sample | Feature setting |
|-----------|--------|-----------------|
| Standard  | ƒ      | cv37=0          |
| Top serif | ƒ      | cv37=1          |

Eng

Affects: U+014A

| Feature                          | Sample | Feature setting |
|----------------------------------|--------|-----------------|
| Standard                         | Ŋ      | cv43=0          |
| Lowercase style on baseline      | ŋ      | cv43=1          |
| Uppercase style with descender   | Ŧ      | cv43=2          |
| Alt. lowercase style on baseline | ɳ      | cv43=3          |

N left hook

Affects: U+019D

| Feature         | Sample | Feature setting |
|-----------------|--------|-----------------|
| Standard        | Ŋ      | cv44=0          |
| Lowercase-style | ɳ      | cv44=1          |

Open-O

Affects: U+0186 U+0254 U+1D10 U+1D53 U+1D97

| Feature   | Sample    | Feature setting |
|-----------|-----------|-----------------|
| Standard  | Ɔ ɔ ɔ ɔ ɔ | cv46=0          |
| Top serif | Ɔ ɔ ɔ ɔ ɔ | cv46=1          |

OU

Affects: U+0222 U+0223 U+1D3D U+1D15

| Feature  | Sample  | Feature setting |
|----------|---------|-----------------|
| Standard | 8 8 8 8 | cv47=0          |
| Open     | 8 8 8 8 | cv47=1          |

**p hook**

Affects: U+01A5

| Feature    | Sample | Feature setting |
|------------|--------|-----------------|
| Standard   | þ      | cv49=0          |
| Right hook | þʳ     | cv49=1          |

**R tail**

Affects: U+2C64

| Feature         | Sample | Feature setting |
|-----------------|--------|-----------------|
| Standard        | Ŕ      | cv55=0          |
| Lowercase-style | ŕ      | cv55=1          |

**T hook**

Affects: U+01AC

| Feature    | Sample | Feature setting |
|------------|--------|-----------------|
| Standard   | Ŧ      | cv57=0          |
| Right hook | Ŧʳ     | cv57=1          |

**V hook**

Affects: U+01B2 U+028B U+1DB9

| Feature                 | Sample           | Feature setting |
|-------------------------|------------------|-----------------|
| Standard                | Ū ū <sup>˘</sup> | cv62=0          |
| Straight with low hook  | Ŵ ŵ <sup>˘</sup> | cv62=1          |
| Straight with high hook | Ŷ ŷ <sup>˘</sup> | cv62=2          |

**Y hook**

Affects: U+01B3

| Feature   | Sample | Feature setting |
|-----------|--------|-----------------|
| Standard  | Ÿ      | cv68=0          |
| Left hook | Ŷ      | cv68=1          |

Ezh

Affects: U+01B7 U+04E0

| Feature        | Sample | Feature setting |
|----------------|--------|-----------------|
| Standard       | Ʒ Ʒ    | cv20=0          |
| Reversed sigma | Ʒ Ʒ    | cv20=1          |

ezh curl

Affects: U+0293

| Feature    | Sample | Feature setting |
|------------|--------|-----------------|
| Standard   | Ʒ      | cv19=0          |
| Large bowl | Ʒ      | cv19=1          |

rams horn

Affects: U+0264 U+10791

| Feature     | Sample | Feature setting |
|-------------|--------|-----------------|
| Standard    | ʁ ʁ    | cv25=0          |
| Large bowl  | ʁ ʁ    | cv25=1          |
| Small gamma | ʁ ʁ    | cv25=2          |

Clicks

Affects: U+01C0 U+01C1 U+01C2 U+2980

| Feature               | Sample | Feature setting |
|-----------------------|--------|-----------------|
| Standard (descending) | ‡      | cv69=0          |
| Baseline              | ‡      | cv69=1          |

Diacritic and symbol alternates

Vietnamese-style diacritics

Affects: U+1EA4 U+1EA5 U+1EA6 U+1EA7 U+1EA8 U+1EA9 U+1EAA U+1EAB U+1EAE U+1EAF U+1EB0 U+1EB1 U+1EB2 U+1EB3 U+1EB4 U+1EB5 U+1EBE U+1EBF U+1EC0 U+1EC1 U+1EC2 U+1EC3 U+1EC4 U+1EC5 U+1ED0 U+1ED1 U+1ED2 U+1ED3 U+1ED4 U+1ED5 U+1ED6 U+1ED7

| Feature  | Sample | Feature setting |
|----------|--------|-----------------|
| Standard |        | cv75=0          |

| Feature          | Sample   | Feature setting |
|------------------|--|-----------------|
|                  | Ấấ Ầầ Ẫẫ Ẫẫ Ắắ Ằằ Ẵẵ Ẵẵ Ếế Ềề Ểể Ễễ Ớớ Ồồ<br>Ỗỗ Ỗỗ |                 |
| Vietnamese-style | Ấấ Ầầ Ẫẫ Ẫẫ Ắắ Ằằ Ẵẵ Ẵẵ Ếế Ềề Ểể Ễễ Ớớ Ồồ<br>Ỗỗ Ỗỗ | cv75=1          |

## Kayan diacritics

Affects: U+0300 U+0301

| Feature      | Sample | Feature setting |
|--------------|--------|-----------------|
| Standard     | ◌̣     | cv79=0          |
| Side by side | ◌̣̣    | cv79=1          |

## Ogonek

Affects: U+0328 U+0104 U+0105 U+0118 U+0119 U+012E U+012F U+0172 U+0173 U+01EA U+01EB U+01EC U+01ED

| Feature  | Sample                              | Feature setting |
|----------|-------------------------------------|-----------------|
| Standard | anything with ę (Aą Eę Ii Uų Qq Œœ) | cv76=0          |
| Straight | anything with ę (Aą Eę Ii Uų Qq Œœ) | cv76=1          |

## Caron

Affects: U+010F U+013D U+013E U+0165

| Feature      | Sample  | Feature setting |
|--------------|---------|-----------------|
| Standard     | ď Ľ ľ ť | cv77=0          |
| Global-style | ď Ľ ľ ť | cv77=1          |

## Modifier apostrophe

Affects: U+02BC U+0312 U+0314 U+A78B U+A78C

| Feature  | Sample  | Feature setting |
|----------|---------|-----------------|
| Standard | ’ ‘ ’ ’ | cv70=0          |
| Large    | ’ ‘ ’ ’ | cv70=1          |

## Modifier colon

Affects: U+A789

| Feature  | Sample | Feature setting |
|----------|--------|-----------------|
| Standard | :      | cv71=0          |
| Expanded | :      | cv71=1          |

## Empty set

Affects: U+2205

| Feature    | Sample | Feature setting |
|------------|--------|-----------------|
| Standard   | ∅      | cv98=0          |
| Zero-style | ∅      | cv98=1          |

## Cyrillic alternates

There are also Cyrillic characters affected by the “Ezh” and “Small capitals” features. Some languages may also use the “Modifier apostrophe”.

## Cyrillic E

Affects: U+042D U+044D

| Feature         | Sample | Feature setting |
|-----------------|--------|-----------------|
| Standard        | Ә ә    | cv80=0          |
| Mongolian-style | ᠡ ᠡ    | cv80=1          |

## Cyrillic shha

Affects: U+04BB

| Feature         | Sample | Feature setting |
|-----------------|--------|-----------------|
| Standard        | Һ      | cv81=0          |
| Uppercase-style | Ң      | cv81=1          |

## Cyrillic breve

Affects: U+0306

| Feature        | Sample               | Feature setting |
|----------------|----------------------|-----------------|
| Standard       | anything with ӱ (ӱӱ) | cv82=0          |
| Cyrillic-style | anything with ӱ (ӱӱ) | cv82=1          |



## Serbian Cyrillic alternates

Unlike other features, this is activated by tagging the span of text as being in the Serbian language, not by turning on an OpenType feature. It is also not available through TypeTuner Web although a similar feature is supported (cv84).

Affects: U+0431

| Feature  | Sample | Feature setting |
|----------|--------|-----------------|
| Standard | Ѓ      |                 |
| Serbian  | Ǧ      | lang= 'sr'      |

## Macedonian Cyrillic alternates

Unlike other features, this is activated by tagging the span of text as being in the Macedonian language, not by turning on an OpenType feature. It is also not available through TypeTuner Web although a similar feature is supported (cv84).

Affects: U+0431

| Feature    | Sample | Feature setting |
|------------|--------|-----------------|
| Standard   | Ѓ      |                 |
| Macedonian | Ǧ      | lang= 'mk'      |

## Serbian and Macedonian Cyrillic alternates

This feature provides an alternate way to activate the Serbian and Macedonian forms in applications that do not support language-specific features. It cannot, however, be used to explicitly turn off these forms in text tagged as being in the Serbian or Macedonian languages.

Affects: U+0431

| Feature                        | Sample | Feature setting |
|--------------------------------|--------|-----------------|
| Standard                       | Ѓ      | cv84=0          |
| Serbian<br>Macedonian<br>forms | Ǧ      | cv84=1          |

## Tone alternates

### Chinantec tones

Affects: U+02CB U+02C8 U+02C9 U+02CA

| Feature         | Sample  | Feature setting |
|-----------------|---------|-----------------|
| Standard        | ˘ ˊ ˋ ˊ | cv90=0          |
| Chinantec-style | ˘ ˊ ˋ ˊ | cv90=1          |

Tone numbers

This feature is not supported in TypeTuner Web.

Affects: U+02E5 U+02E6 U+02E7 U+02E8 U+02E9 U+A712 U+A713 U+A714 U+A715 U+A716

| Feature  | Sample              | Feature setting |
|----------|---------------------|-----------------|
| Standard | ᳵ ᳶ ᳷ ᳸ ᳹ ᳺ ᳻ ᳼ ᳽   | cv91=0          |
| Numbers  | 5 4 3 2 1 5 4 3 2 1 | cv91=1          |

Hide tone contour staves

This feature is not supported in TypeTuner Web.

Affects: U+02E5 U+02E6 U+02E7 U+02E8 U+02E9 U+A712 U+A713 U+A714 U+A715 U+A716

| Feature     | Sample                  | Feature setting |
|-------------|-------------------------|-----------------|
| Standard    | ᳵ ᳶ ᳷ ᳸ ᳹ ᳺ ᳻ ᳼ ᳽ (ᳶ ᳷) | cv92=0          |
| Hide staves | ᳵ ᳶ ᳷ ᳸ ᳹ ᳺ ᳻ ᳼ ᳽ (ᳶ ᳷) | cv92=1          |

Numeral alternates

Subscript numerals

This feature is not supported in TypeTuner Web.

Affects: U+0030 U+0031 U+0032 U+0033 U+0034 U+0035 U+0036 U+0037 U+0038 U+0039

| Feature   | Sample              | Feature setting |
|-----------|---------------------|-----------------|
| Standard  | 0 1 2 3 4 5 6 7 8 9 | subs=0          |
| Subscript | 0 1 2 3 4 5 6 7 8 9 | subs=1          |

Superscript numerals

This feature is not supported in TypeTuner Web.

Affects: U+0030 U+0031 U+0032 U+0033 U+0034 U+0035 U+0036 U+0037 U+0038 U+0039

| Feature     | Sample              | Feature setting |
|-------------|---------------------|-----------------|
| Standard    | 0 1 2 3 4 5 6 7 8 9 | sups=0          |
| Superscript | 0 1 2 3 4 5 6 7 8 9 | sups=1          |

Automatic fractions

When activated this feature will automatically create fractions when numerals are separated by either the fraction slash (U+2044) or the solidus (U+002F). This feature is not supported in TypeTuner Web.

Affects: U+0030 U+0031 U+0032 U+0033 U+0034 U+0035 U+0036 U+0037 U+0038 U+0039 U+002F U+2044

| Feature         | Sample  | Feature setting |
|-----------------|---|-----------------|
| Standard (none) | $\frac{1}{2}$ $\frac{456}{789}$ $\frac{1}{2}$ $\frac{456}{789}$ | frac=0          |
| Automatic       | $\frac{1}{2}$ $\frac{456}{789}$ $\frac{1}{2}$ $\frac{456}{789}$ | frac=1          |

This guide is from the [Doulos SIL project](#) version 7 and is copyright © 1994-2024 SIL Global.